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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/670,093	09/26/2000	Craig R. Shambaugh	00EC018/77779	3663	
7590 06/07/2004			EXAMINER		
Jon P. Christensen, Esq.			ALBERTALLI, BRIAN LOUIS		
WELSH & KA			ART UNIT	PAPER NUMBER	
22nd Floor	' 1 D1			17d DK NOMBER	
120 South Riverside Plaza Chicago, IL 60606			2655	7	

Please find below and/or attached an Office communication concerning this application or proceeding.

.		Applica	Application No. Applicant(s)					
			093	SHAMBAUGH ET AL.				
C	Office Action Summary	Examin	ər	Art Unit				
		Brian L		2655				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
THE MAIL - Extensions of after SIX (6) - If the period - If NO period - Failure to re Any reply re	ENED STATUTORY PERIOD F ING DATE OF THIS COMMUN of time may be available under the provisions MONTHS from the mailing date of this comr for reply specified above is less than thirty (3 I for reply is specified above, the maximum st ply within the set or extended period for reply ceived by the Office later than three months int term adjustment. See 37 CFR 1.704(b).	ICATION. s of 37 CFR 1.136(a). In no enunication. 30) days, a reply within the statutory period will apply and will, by statute, cause the apply and the statute of the statute.	event, however, may a reply be tir atutory minimum of thirty (30) day will expire SIX (6) MONTHS from pplication to become ABANDONE	mely filed ys will be considered timel the mailing date of this c ED (35 U.S.C. § 133).				
Status								
1)☐ Resp	ponsive to communication(s) file	ed on						
2a)∐ This	action is FINAL.	2b)⊠ This action is	non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of	f Claims							
4a) C 5)	4) Claim(s) 1-26 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-26 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.							
Application P	apers							
10)⊠ The d Appli Repla	specification is objected to by the drawing(s) filed on 26 September cant may not request that any objected to drawing sheet(s) including that or declaration is objected to	er 2000 is/are: a) ction to the drawing(s) the correction is requ	be held in abeyance. Serired if the drawing(s) is ob	e 37 CFR 1.85(a). njected to. See 37 CF	FR 1.121(d).			
Priority under	35 U.S.C. § 119			•				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
Attachment(s)								
	eferences Cited (PTO-892) raftsperson's Patent Drawing Review (F	OTO 048)	4) Interview Summary Paper No(s)/Mail Da					
3) 🔲 Information	raftsperson's Patent Drawing Review (F Disclosure Statement(s) (PTO-1449 or)/Mail Date		5) Notice of Informal F 6) Other:		D-152)			

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DETAILED ACTION

Drawings

- 1. New corrected drawings are required in this application because the drawings are drawn by hand and are difficult to read. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.
- 2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "62" has been used to designate both a second script and a first set of paragraphs. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

- 3. The disclosure is objected to because of the following informalities:
- a) On page 9, line 17 and 18, the phrase "A objective" should be –An objective--.
 - b) On page 12, line 21, "cuxtomer" should be –customer--.

 Appropriate correction is required.

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4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 72, 74, 76, 78, and 80. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

- 5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
 - (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 6. Claims 1-2, 8, 11-12, 18, 21, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Farrell (U.S. Patent 6,721,416).
- 7. In regard to claim 1 and 11, Farrell discloses a method and apparatus that presents script to a telemarketer (agent). The method and apparatus recognizes the content of the response of a customer by instantiating a voice application (62) to monitor the voice interaction (column 5, lines 20-21). Key words are detected by the voice application (62) by searching the text for occurrences of words in the word table (64) (column 5, lines 38-40). The detected keywords are evaluated in context to determine the information content by the voice processing software (44). The voice

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processing software (44) includes a natural language understanding server (column 3, line 67), which inherently determines the context of keywords to determine information content (column 3, line 67). The voice application (62) selects text from the word table (64) that most closely matches the words or phrases spoken (column 5, lines 38-40). Once a phrase spoken by the customer is identified, the voice application (62) presents a script corresponding to the customer response to the telemarketer (agent) (column 6, lines 7-10).

- 8. In regard to claim 2 and 12, Farrell discloses that the telemarketer's (agent's) word content is recognized (column 5, lines 32-37).
- 9. In regard to claims 8 and 18, Farrell discloses that a negative response (confrontational word) from the customer is recognized (column 6, lines 7-10).
- In regard to claim 21, Farrell discloses an apparatus that presents script to a telemarketer (agent). The apparatus uses speech recognition software adapted to recognize word content of a customer (automatic speech recognition server 54 is based on IBM ViaVoice (column 4, lines 18-20). The parsing processor, information content processor and information comparator are all based on IBM's Voice Response for Windows (column 3, lines 45-59), which is adapted for use in the apparatus.

 Workstations (14) include a script display (VDU) that presents script to the telemarketer (agent) corresponding to the customer response (column 6, lines 7-10).

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Claim Rejections - 35 USC § 103

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claims 9-10 and 19 –20 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell.
- 13. In regard to claims 9, 19, and 25, Farrell does not expressly disclose recognizing obscenities in the response of the customer. However, Farrell does recognize confrontational words and phrases as well as polite and non-polite words and phrases (column 6, lines 35-38). Obscenities could be considered both confrontational and non-polite, so adapting Farrell to recognize obscenities would provide another means of determining whether words and phrases were confrontational or non-polite.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Farrell to recognize obscenities in order to provide another means of determining whether words and phrases were confrontational or non-polite.

14. In regard to claims 10 and 20, Farrell does not disclose a means of terminating the conversation after a negative response has been recognized. It would be an obvious matter of design choice to modify Farrell so a call was terminated once a negative response was recognized. If a customer is confrontational to the point of using obscenities, there is generally no need to continue the conversation. It would have

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been obvious to one of ordinary skill in the art at the time of invention to terminate the conversation because terminating the conversation would allow the telemarketer (agent) to continue with another customer.

- 15. Claims 3-5, 13-15, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell in view of Walker et al. (U.S. Patent 6,567,787).
- 16. In regard to claims 3, 13, and 22, Farrell discloses all the features of the instant claimed invention, except detecting deviations between the recognized word content of the telemarketer and the presented script.

Walker et al. discloses a system of detecting deviations between the recognized word content of a telemarketer and the presented script (column 16, lines 29-33). The system generates a script (prompt) to be spoken (Fig. 8A, 808) and then recognizes the spoken response of the telemarketer (812) (column 8, lines 63-68, and column 9, lines 1-15). The system then checks if the telemarketers word content deviates from (does not correspond to) the given script (prompt) (814) (column 9, lines 16-18). Modifying Fuller to check if the telemarketers recognized word content deviates from the presented script as taught by Walker et al. would allow further action to be taken, such as preventing touch screen controllers from appearing, if the telemarketer deviated from the presented script, as taught by Walker et al. (column 9, lines 36-39 and column 16, ins 29-33).

Therefore, It would have been obvious to one of ordinary skill in the art at the time of invention to modify Fuller to check if the telemarketers recognized word content

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deviates from the presented script, in order to take a further action if the recognized word content deviated from the presented script.

17. In regard to claims 4 and 14, Farrell discloses all the features of the instant claimed invention except detecting deviations between the recognized word content of the telemarketer and the presented script and measuring an objective performance level of the telemarketer and associating the measured performance level with the deviation.

Walker et al. discloses a system of detecting deviations between the recognized word content of a telemarketer and the presented script that further includes an objective measure of the telemarketer. Walker et al. discloses a table (300) which includes a measure of the number of transactions in which the telemarketer (operator) participated (326), the number of transactions in which the verbal message was spoken properly by the telemarketer (operator) (328), and the of percentage times the message was spoken properly (330) (column 5, lines 46-62). Modifying Fuller to include a means of measuring an objective performance level as taught by Walker et al. would allow the telemarketers performance to be tracked and incentives such as bonuses could be offered based on that telemarketer's performance as taught by Walker et al. (column 6, lines 24-28).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Fuller to include a means of measuring an objective performance level as taught by Walker et al. in order to allow the telemarketers performance to be tracked so as to award incentives.

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18. In regard to claims 5 and 15, Farrell discloses monitoring the voice interaction between a telemarketer (agent) and a customer and checking to see if the dialogue of the telemarketer (agent) has caused the performance level (confrontation value) to exceed a threshold and if so, changing the script presented to the telemarketer (column 6, lines 1-5).

Farrell does not disclose detecting deviations between the recognized word content of the telemarketer and the presented script and measuring an objective performance level of the telemarketer, associating the measured performance level with the deviation, and changing the script when the performance level exceeds a threshold level.

Walker et al. discloses as system of detecting deviations between the recognized word content of the telemarketer and the presented script and calculating a performance measurement based on deviations from the script (column 5, lines 46-62). Using the objective performance measurement as taught by Walker et al. as the basis for the threshold level used to change the script presented to the telemarketer as taught by Farrell would allow the scripts to be adapted to the current user so that simpler scripts could be provided to telemarketers (operators) less adept at providing complex verbal messages, as taught by Walker et al. (column 6, lines 11-23).

It would have been obvious to one of ordinary skill in the art at the time of invention to use the objective performance measurements as taught by Walker et al. as the basis for the threshold level used to change the script presented to the telemarketer

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as taught by Farrell in order to adapt the scripts to the current user so that simpler scripts could be provided to telemarketers (operators) less adept at providing complex verbal messages as taught by Walker et al. (column 6, lines 11-23).

19. Claims 6-7, 16-17, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell, as applied to claims 1 and 11, in view of Knight (U.S. Patent 6,313,833).

Farrell discloses all features of the instant claimed invention except subjectively evaluating a response of the customer by the telemarketer, using that subjective evaluation to resolve ambiguity, and a cursor and receptiveness chart used by the telemarketer to subjectively evaluate the customer.

Knight discloses an application for use by a telemarketer that measures allows the telemarketer (user) to subjectively evaluate the response of a customer (column 12, lines 17-24).

The application includes a feedback window (260) that allows the telemarketer (user) to visually display data input into the data window (210) thereby resolving any ambiguity column 11, lines 48-55).

Additionally, the application allows the telemarketer (user) to move a cursor (object or data parameter) onto a receptiveness chart (canvas 215) allowing the telemarketer (user) to subjectively evaluate a customer (column 7, lines 39-58).

Modifying Farrell to include a cursor and receptiveness chart to subjectively evaluate the telemarketer (user) would provide meaningful analyses of subjective data

that could be used to present potential options to the telemarketer, as taught by Knight (column 3, lines 54-56 and column 12, lines 21-23).

It would have been obvious to one of ordinary skill in the art at the time of invention to include a receptiveness chart to subjectively evaluate a customer's response in order to provide meaningful analyses of subjective data that could be used to present potential options to the telemarketer, as taught by Knight.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nasukawa (U.S. Patent 5,761,631) discloses a parsing system for natural language processing that evaluates text in context. Thorne (U.S. Patent 6,100,891 discloses an interface for interactively providing a script to a telemarketer wherein the telemarketer manually enters the customers response. Kneipp (U.S. Patent 6,102,970) discloses a method of selecting a path through a script based on a customer's response to the script. Macaulay (U.S. Patent 6,651,045) discloses a system that monitors the conversation between a telemarketer and a customer and displays relevant information to the telemarketer based on the context of the conversation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian L Albertalli whose telephone number is (703) 305-1817. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis Smits can be reached on (703) 305-3011. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BLA 5/14/04

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